

KJMM Pork & Grain Range Farm – 120417 Checklist Supplement

April 17, 2012 Complaint Response:

On 04/16/12 a complaint was made to the Illinois EPA Marion Regional office reporting land application runoff into a private pond resulting in a fish kill at **Exemption 6 and Exemption 7(C)**. In response to the complaint, Joe Stitely and I (Brian Rodely) conducted a complaint investigation beginning at the site of the fish kill in the back yard of the residence at the address listed above. Building references can be found in the site plan and references to photos can be found in the photo pages attached.

We arrived at the residence at approximately 9:15AM, donned sanitary footwear, and made contact with the daughter of the complainant to explain our presence. She acknowledged that her father told her someone from our Agency may investigate the pond. Behind the house we observed dark colored water in the pond and unnamed tributary to the pond from the farm field to the south. We walked out south to the land application field where we noted what appeared to be dark manure-laden water running from the field. An attempted dam is noted in the field to slow or stop waste from running off the field as seen in photos 001, 002, and 003. Manure application appears to have occurred within 100 feet south of the unnamed tributary that feeds the private pond effectively loading the unnamed tributary as shown in photos 004, 005, and 006. Manure loading of the pond is shown in photos 007 and 008 while small dead fish along the northern edge of the pond are shown in photo 009. A small swale also delivers runoff water from the residential yard as shown in photo 010. Photo 011 shows sanitary sewer gray water from the residence that runs through the swale into the pond that would likely add nutrient loading to the affected pond. Finally, a sample was taken of the unnamed tributary affected by land application immediately upstream of riprap shown in photo 006. Following the investigation at the site I conducted an exit interview with the daughter of the complainant, left the soiled footwear, and we drove to Marissa to ice the samples.

We arrived at KJMM Range farm at approximately 10:15AM and were met by a subject who identified himself as Brad McCarty the manager of the farm. I introduced us and informed him we received a complaint concerning land application from the farm and needed to conduct an inspection of the facility. McCarty agreed and told us we could meet in the office area ahead and that parking anywhere was acceptable as well as the use of sanitary footwear which was put on while exiting the vehicle. During the interview the checklist was completed and McCarty told us we could tour the facility.

McCarty attempted to contact his supervisor and I asked McCarty to accompany us on the site tour. We began to walk north toward the large confinement buildings. While walking north we crossed a low water crossing that had what appeared to be dark manure-laden water running in the ditch identified by McCarty as the “drainage ditch”. We followed the drainage ditch upstream to a location east of Barn 9 where a large pooled area of manure was still running off from an apparent line rupture or leak during land application as shown in photos 012 and 013. Next, we observed the 12 large confinement buildings (Barns 1-12) that are all 41’X96’X10’ except barns 1, 2, and 3 are 41’X206’X10’. No discharge was noted from Barns 1-12 but observed spilled feed below the bulks bins as shown in photo 014 and the pumping operation (photo 015) for land application that had been ongoing to the east of the facility including the

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affected field adjacent to the complainant. McCarty and I continued west to the composting operation and noted the lack of cover or containment for compost leachate as shown in photos 016, 017, and 018. Next, I observed the White Barn that appeared to recently overflow with manure-laden water shown in photo 019 and is full as seen in the port shown in photo 020. White (16'X40'X4'), House (80'X35'X8'), Brown (80'X35'X6'), and Cable Bay (120'X36'X8') barns are manually pumped to stage 1 of the 3 stage lagoon system. Stage 1 gravity overflows to stage 2 as shown in photo 021, stage 2 to stage 3 identified in photo 022, then to stage 3 represented in photo 023. Wastewater from stage 3 overflows through a discharge pipe into an unnamed tributary south to the drainage ditch. The discharge outlet is shown in photo 024 and the inlet is shown in photo 025. KJMM Partner Jared Schilling arrived at that time and I discussed all the findings of the inspection with him and provided recommendations for compliance. I also advised Schilling of our enforcement process, duty to apply for NPDES Permit, and the Livestock Waste Release Reporting Requirements. I told Schilling that we will taking samples of the drainage ditch, compost leachate, and stage 3 discharge. Photo 026 shows the sample taken on the east side of Range Ln in the collection ditch. Sampling of the compost leachate east of the composting bins is shown in photo 027 and the sample taken from the discharge pipe of the stage 3 lagoon is shown in photo 028.

Summary/Proposed Actions:

In summary, there were several violations of the Illinois Environmental Protection Act noted during the inspection. Noted violations of the Act include Sections stating in part pursuant to Section 12(a) "No person shall: Cause or Threaten or Allow the discharge of any contaminants into the environment so as to cause or tend to cause water pollution in Illinois", Section 12(d) " No person shall deposit any contaminants upon the land in such a place and manner so as to create a water pollution hazard", and Section 12(f) "No person shall cause, threaten or allow the discharge of any contaminant into the waters of the state without an NPDES permit".

KJMM – Range Farm should immediately consider the following:

- Land apply at agronomic rates affected water and manure solids from the contaminated pond. Flushing of the unnamed tributary to the pond should be part of the effort to clean manure solids collected in the tributary.
- Clean pooled areas of manure in the field attributed to a manure line leak or rupture and land apply at agronomic rates.
- Clean spilled feed from concrete pads below bulk storage bins to prevent runoff of affected storm water.
- Contain compost leachate from the composting operation and direct to waste storage to land apply at agronomic rates. Covering the composting operation should be considered to eliminate the need for compost leachate management.
- Pump down the White Barn manure pit and land apply at agronomic rates.

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- Pump down stage 3 of the lagoon system and permanently remove or cap discharge pipe in the berm to contain livestock waste for land application.
- Remove tap-root vegetation and trees from lagoon berms to ensure integrity. Maintain berms by periodically mowing to prevent establishment of tap-root vegetation.
- Implement staff gauges and record levels in the building pits and lagoons to maintain adequate freeboard for waste containment.
- Obtain a comprehensive nutrient management plan for the facility to aid tracking of manure application.
- Apply for an NPDES permit for Livestock Operations.